



## ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

MEMORANDUM

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DATE: May 9, 1985

JUN 03 1985

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TO: Land Division File

EPA-DLPC

MAY 23 1985

FROM: Rick Lanham, DLPC/FOS - Central Region

EPA-DLPC

SUBJECT: LPC #16700000 - Sangamon County - Springfield/Fiat Allis  
ILD #067406280 (C-85-65-C)

On May 9, 1985, an investigation was conducted by William Zierath (DLPC-FOS) and I (Rick Lanham) at the Fiat Allis facility in response to a complaint alleging the on-site disposal of toxic and hazardous wastes. The complaint (a letter) alleged that PCB's have leaked from electrical substations, and that cyanide has been disposed of near the heat treatment facilities, and that other hazardous or toxic wastes have been disposed of on-site.

At 9:15 a.m. William Zierath and I met with the following officials of Fiat Allis (1) Mr. Wayne Woelke (Manager - Plant Engineering and Maintenance), (2) Mr. Roger J. O'Neil (Manager - Industrial Relations), and (3) Mr. Hurley Ballenger (Acting Plant Engineer). We explained the complaint to the representatives of Fiat Allis and asked if they had any knowledge of the alleged incidents of on-site disposal of toxic and hazardous wastes.

Mr. Woelke stated he had no knowledge of on-site disposal and that cyanide is used in the electroplating of copper to gears and pinions. Mr. Ballenger stated that some leakage had occurred from PCB transformers, but that no on-site disposal had occurred. Mr. Ballenger also stated that all PCB transformer maintenance is conducted by High Voltage Maintenance Corp. (Indianapolis, IN). The PCB transformers are inspected quarterly as required by the USEPA. Mr. Ballenger stated that quarterly inspection logs from May 1983, through February 1985, were available for review. Inspection logs prior to 1983 were supposedly misplaced during a move. The quarterly logs were reviewed and copies were obtained. Copies of PCB transformer maintenance orders were available for review from 8-18-81. Copies of the maintenance orders were obtained.

Mr. Ballenger stated that Mr. Ralph Oakley, (Electrical Engineer) had all transformers inspected in 1976 to determine if they contained PCB's. At present, 14 PCB (padmount) transformers are in operation in 10 substations, and one PCB transformer is in storage. Also located at the facility is an in service bank of 72 PCB capacitors, plus 2 capacitors in storage.

EPA Region 5 Records Ctr.



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In regards to the cyanides, we inquired about the aforementioned electroplating line. Mr. Ballenger reiterated that cynaide was used in the copper plating of gears and pinions. Also, the electroplating process has used cadmium and chrome. According to the facilities records, the plating operation started about December 1956.

Mr. Ballenger stated that the plating operation is used only about once a week. We inquired as to how the disposal of the plating sludge and waste water occurred. Mr. Woelke and Mr. Ballenger stated that there was no disposal of the sludge that is generated or of the contaminated water. Supposedly the water from the plating line vats, drainage pit, and sump is allowed to evaporate, and water is added to the system when necessary.

After the discussion of the plating line and the PCB transformer substations, William Zierath and I accompanied Mr. Ballenger on an inspection of the plating line and PCB transformer substations.

The plating line is located in the north east corner of Building #1. The present plating line consists of 4 plating solution vats, a work table, exhaust hoods, a sump and a drainage pit for plating sludge. The plating line covers an area approximately 36 feet in length (east-west) and approximately 7.75 feet in width (north-south). The plating line (west to east) consists of (1) a caustic vat, (2) a rinse vat, (3) a work table (4) a copper plating vat, and (5) a rinse vat. The vats contain cloudy liquids. Signs above the copper plating vat, and the furthest east rinse vat, read "DANGER CYANIDE". At the east end of the plating line is an in-ground sump covered by metal plates. One plate contained a hole, approximtately 5" in diameter, apparently for drainage into the sump. Immediately east of the sump is the east wall of Building #1. Beneath the entire plating line, there are wood slats lying north to south. The wooden slats extend south of the plating line for approximately 3 ft. and are covered with rubber mats for traction. The area under the plating line, approximately 36 ft. in length by 7.75 ft. in width is the drainage pit for the line. The pit appeared to contain liquids and sludge.

The inspection of the plating line and drainage pit did not reveal any obvious point of discharge to drains or the sewer. Mr. Joe Hemberson, a superintendent, stated that the plating line is used approximately one day a week, and that the water in the vats probably evaporates. We explained to Mr. Ballenger that we needed

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to determine if the plating line drained to a sewer and requested to review the facilities plans of storm and sanitary sewers. Also we explained that Fiat Allis should sample the pit and sump sludge, to determine if the waste is hazardous. We proceeded to the area outside and east of Building #1. We observed a sewer manhole, approximately 10 feet northeast of the window located next to the plating line. There was no apparent indication that the manhole cover had been removed recently. We then proceeded to inspect the electrical substations.

The inspection of the substations found small leaks approximately 1" to 2" in diameter at two substations, both located in building #14, substations #3 and substation #5. Both leaks were very small and posed no apparent hazard to employees. Mr. Ballenger noted both leaks and stated that they would be repaired. The substations were located above the main floor of the site and in areas that allowed access only by climbing ladders, thus allowing very limited access to the equipment by employees. Blue prints of the locations of all PCB and non PCB transformers have been obtained. The 72 capacitor bank is located above gravel, outside and surrounded by a locked fence, in the northeast area of the site (see blue prints). No apparent leaks, from the capacitors were observed.

After completing the inspection of the PCB transformers, we reviewed blue prints for the storm and sanitary sewers, plating line, and transformers (copies have been obtained). Also we reviewed the PCB transformer inspection and maintenance reports (copies have been obtained).

The investigation of the facility found no apparent on-site disposal of PCB wastes, therefore, no soil sample was taken for PCB analysis. However, in regards to the inspection of the plating line, and after a review of the storm sanitary sewer blue prints, we decided to sample near the manhole and sewer located outside and northeast of the plating line (Building #1). A soil sample was taken from the area adjacent to the window (Building #1), east of the plating line. The soil sample (sample #1) was a medium brown soil, fine powder-like to small chunks in size, and containing small rocks. The soil sample will be tested for cyanide, cadmium, chrome and copper.

The investigation was concluded at 12:40 p.m.

RGL/pdg

Attachment

cc: DLPC/FOS - Central Region  
DLPC/FOS, Manager  
C. Schien